

## KEY PROVISIONS OF NJ DEP AIR 7:27, SUBCHAPTER 8

[Based on August 18, 1997 Proposed Changes]

*[Current as of May, 1998]*

### A. Definitions (7:27-8.1)

"**Air contaminant**" means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

"**Amendment**" means a change made to a permit and certificate under N.J.A.C. 7:27-8.21, Amendments.

"**Compliance plan change**" means a change made to a permit and certificate under N.J.A.C. 7:27-8.19, Compliance plan changes.

"**Construct**" or "**construction**" means to fabricate or erect equipment or control apparatus at a facility where it is intended to be used, but shall not include the dismantling of existing equipment or control apparatus, site preparation, or the ordering, receiving, temporary storage, or installation of equipment or control apparatus. Unless otherwise prohibited by Federal law, "construct" or "construction" shall also not include the pouring of footings or placement of a foundation where equipment or control apparatus is intended to be used.

"**Control apparatus**" means any device which prevents or controls emissions.

"**Dry Cleaning Equipment**" means equipment located at a commercial establishment, used for cleaning textiles or garments, in which the cleaning agent is a chemical or petroleum solvent.

"**Equipment**" means any device capable of causing the emission of an air contaminant and any stack or chimney, conduit, flue, duct, vent or similar device connected or attached to, or serving the equipment.

"**Facility-wide permit**" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Air Pollution Control Act, N.J.A.C. 26:2c-1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner or operator of the priority industrial facility pursuant to N.J.S.A. 13:1D-41 and 42. This term shall have the same meaning as defined for the term "facility-wide permit" at N.J.A.C. 7:1K-1.5.

"**General permit**" means a type of standardized permit and certificate, issued by the Department under N.J.A.C. 7:27-8.8.

**"Insignificant source"** means, for the purposes of this subchapter, equipment or control apparatus that does not need a permit and certificate under N.J.A.C. 7:27-8.2.

**"Install" or "installation"** means to carry out final setup activities necessary to provide equipment or control apparatus with the capacity for use or service. This term includes but is not limited to, connection of equipment or control apparatus, associated utilities, piping, ductwork or conveyor systems. This term does not include construction, as defined above, nor the reconfiguration of equipment or control apparatus to an alternate configuration specified in a permit application and approved by the Department.

**"Modify" or "modification"** means any physical change in, or change in the method or operation of, existing equipment or control apparatus that increases the actual amount of any air contaminant emitted by that equipment or control apparatus or that results in the emission of any air contaminant, or air contaminant category, not previously emitted, but shall not include normal repair and maintenance.

**"Operating certificate" or "certificate"** means a certificate issued by the Department under this subchapter to authorize operation of equipment or control apparatus, pursuant to the Air Pollution Control Act of 1954, specifically N.J.S.A. 26:2C-9.2.

**"Operating permit"** means the permit described in Title V of the Federal Clean Air Act, 42 U.S.C. §§7661 et seq., and in N.J.A.C. 7:27-22. This term shall include a general operating permit that is applicable facility wide, but does not include a general operating permit that applies only to a part of a facility. Where a general operating permit applies only to a part of a facility, the general operating permit shall be incorporated into the operating permit. This term also includes an operating permit issued for a temporary facility; for a facility subject to a MACT or GACT standard pursuant to N.J.A.C. 7:27-22.26; or for a component of a facility pursuant to N.J.A.C. 7:27-22.5(j).

**"Permit revision"** means a change made to a permit and certificate under N.J.A.C. 7:27-8.18, Permit revisions.

**"Preconstruction permit" or "permit"** means a legally valid permit, authorizing construction, installation, reconstruction, or modification of a significant source, issued by the Department under this subchapter pursuant to the New Jersey Air Pollution Control Act and in particular N.J.S.A. 26:2C-9.2.

**"Reconstruct" or "reconstruction"** means the replacement of parts of equipment included in a process unit, or the replacement of parts of control apparatus, if the fixed capital cost of replacing the parts exceeds both of the following amounts:

1. Fifty percent of the fixed capital cost that would be required to construct a comparable new process unit or control apparatus; and
2. \$80,000, in 1995 dollars, adjusted by the Consumer Price Index.

**"Repair or maintenance"** means upkeep of existing equipment or control apparatus, including the replacement of parts, but does not include the reconstruction of equipment or control apparatus.

**"Seven-day-notice change"** means a change made to a permit and certificate under N.J.A.C. 7:27-8.20, Seven-day-notice changes.

**B. Equipment Requiring a Permit Certificate (7:27-8.2(c))**

The following equipment and control apparatus, if it emits air contaminants, requires a preconstruction permit and an operating certificate:

1. Commercial fuel burning equipment with a maximum rated heat input of 1,000,000 BTU per hour or greater to the burning chamber.
2. Equipment that has the potential to emit any Group 1 or Group 2 Toxic Substance (TXS) (or a combination thereof) at a rate greater than 0.1 pounds per hour (45.4 grams per hour). A toxic substance is defined in NJAC 7:27, Subchapter 17 as any of the following substances:

<b><u>Group I</u></b>	
<b>Name</b>	<b>CAS Number</b>
Benzene (Benzol)	71-43-2
Carbon tetrachloride (Tetrachloromethane)	56-23-5
Chloroform (Trichloromethane)	67-66-3
Dioxane (1,4-Diethylene dioxide)	123-91-1
Ethylenimine (Aziridine)	151-56-4
Ethylene dibromide (1,2-Dibromoethane)	106-93-4
Ethylene dichloride (1,2-Dichloroethane)	107-06-2
1,1,2,2-Tetrachloroethane (sym Tetrachloroethane)	79-34-5
Tetrachloroethylene (Perchloroethylene)	127-18-4
1,1,2-Trichloroethane (Vinyl trichloride)	79-00-5
Trichloroethylene (Trichlorethene)	79-01-6
<b><u>Group II</u></b>	
Methylene chloride (Dichloromethane)	75-09-2
1,1,1-Trichloroethane (Methyl chloroform)	71-55-6

3. Dry cleaning equipment.

4. A surface cleaner that uses a cleaning solution containing five percent or more VOCs, HAPs, or VOC and HAP, combined, and which is:

- i. An unheated open top surface cleaner with a top opening of greater than six square feet (0.56 square meters) or a capacity greater than 100 gallons;
- ii. A heated open top surface cleaner;
- iii. A conveyORIZED surface cleaner; or
- iv. A stationary spray cleaning or surface stripping operation using one half gallon or more of cleaning solution in any one hour.

5. Equipment used in a graphic arts operation, including newspaper, lithographic, gravure, flexographic, letterpress and screen printing, in which the quantity of ink, fountain solution, or cleaning material used by a source in any one hour is equal to or greater than one half gallon.

6. Any tank or vessel that has a capacity of more than 100 gallons and is used:

- i. In etching, pickling, or plating; or
- ii. In chromium electroplating or chromium anodizing.

7. A transfer operation involving gasoline or other VOCs regulated under N.J.A.C. 7:27-16.3 or 16.4, or a marine tank vessel loading or ballasting operation regulated under N.J.A.C. 7:27-16.5, if the operation is required to have a control device other than bottom fill or submerged fill.

8. Stationary storage tanks that have a capacity in excess of 10,000 gallons and are used for the storage of liquids, except water or distillates of air.

9. Stationary storage tanks that have a capacity of 2,000 gallons or greater and are used for the storage of applicable VOC.

10. Tanks, reservoirs, containers and bins that have a capacity in excess of 2,000 cubic feet and are used for the storage of solid particles.

11. Stationary material handling equipment using pneumatic, bucket or belt conveying systems from which emissions occur.

12. Equipment used in a surface coating operation including, but not limited to, spray and dip painting, roller coating, and electrostatic depositing, in which the quantity of coating or cleaning material used by a source in any one hour is equal to or greater than one half gallon of liquid.

13. Any equipment used for the burning of noncommercial fuel, crude oil or process by-products in any form.

14. An incinerator, except an incinerator exempted under 7:27-8.2(d)9 below.

15. Equipment which is used for treating groundwater, industrial wastewater, or municipal wastewater with a solids content of less than two percent by weight as it enters the equipment (typical operations performed by this type of equipment include, but are not limited to, air stripping, aeration, digestion, thickening, flocculating, surface impounding, and dewatering), if the equipment does either of the following:

i. Treats or handles influent which has one or both of the following:

(1) A total concentration of VOCs and Group 2 TXS in the influent of 3,500 parts per billion by weight (ppbw) or more; or

(2) A total Group 1 TXS concentration in the influent of 100 ppbw or more; or

ii. Discharges more than 50 pounds per hour of sludge with a solids content of two percent by weight or greater.

16. Equipment used for treating waste soils or sludges, including municipal solid wastes, industrial solids wastes, or recycled materials, if the influent to the equipment has a solids content of two percent by weight or greater. Typical operations performed by this type of equipment include, but are not limited to, soil cleaning, composting, pelletizing, grit classifying, drying, and transfer station operations.

17. Equipment used for the purpose of venting a closed or operating dump, sanitary landfill, hazardous waste landfill or other solid waste facility, directly or indirectly into the outdoor atmosphere including, but not limited to, any transfer stations, recycling facility, or municipal solid waste composting facility.

18. Any control apparatus serving equipment for which a permit and certificate is required pursuant to this section.

19. Equipment in which the combined weight of all raw materials used, excluding air and water, exceeds 50 pounds in any one hour, except for equipment excluded from permit requirements under (c)3 through 18 above (e.g., grinding 150 lbs. of pigment for 30 minutes. See B.8(i) for clarification).

### **C. Insignificant Sources (7:27-8.2(d))**

Even if a source is listed in 7:27-8.2(c), it is an insignificant source and does not need a permit and certificate if it is one of the following:

1. A storage tank maintained under a pressure greater than one atmosphere provided that any vent serving such storage tank has the sole function of relieving pressure under emergency conditions;

2. Storage tanks, reservoirs, containers, or bins used on any farm for the storage of agricultural commodities produced by or consumed in the farm's own operations. This exemption does not include storage tanks, reservoirs, containers or bins used by distributors of agricultural commodities or by research facilities which develop products for use in agricultural production;

3. Equipment or control apparatus located at a facility with an operating permit issued under N.J.A.C. 7:22-22. Until the operating permit is issued, however, the equipment and control apparatus remain subject to this subchapter;
4. Aeration basins, lagoons and settling basins at publicly owned treatment works or domestic treatment works;
5. Equipment that is used for the sole purpose of wood working by sanding, drilling, cutting or planing, unpainted wood or wood products, and which vents solely into a room;
6. Hand held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal or plastic. For the purposes of this subsection, "hand-held" means "can reasonably be carried by one person;"
7. Equipment at a battery charging station, except at a battery manufacturing plant;
8. A source used in any of the following, if the source is not part of a production process:
  - i. The activities of maintenance shops, such as welding, gluing, and soldering, performed indoors or outdoors;
  - ii. A laundry operation that does not use dry cleaning processes, and which services uniforms or other clothing used at the facility;
  - iii. Architectural maintenance activities conducted to take care of the buildings and structures at a facility, including repainting, reroofing, and sandblasting; or
  - iv. Food preparation to service facility cafeterias and dining rooms;
9. An incinerator that serves a one or two family dwelling; or that serves a multi-occupied dwelling containing six or fewer family units, one of which is occupied by the owner of the dwelling; or
10. A source which is grandfathered because it:
  - i. Was in operation prior to the date that sources of its kind were first subject to permit requirements under this subchapter;
  - ii. Has not been reconstructed or modified since that date; and
  - iii. Is still in operation.

**D. Special Facility-Wide Permit Provisions (7:27-8.27)**

(a) The holder of a facility-wide permit, as defined at N.J.A.C. 7:27-8.1, is not required to obtain a permit and certificate under this subchapter for a planned action or change if:

1. The production process affected by the action or change is identified in and subject to an

approved facility-wide permit issued under N.J.S.A. 13:1D-35 et seq.;

2. The planned action or change is either:

- i. Allowed under the facility-wide permit; or
- ii. Documented in a modification to a Pollution Prevention Plan, which satisfies the requirements of N.J.A.C. 7:1K-3 and 4 or in a Pollution Prevention Assessment as defined in N.J.A.C. 7:1K-1.5; or

3. The planned action or change does not cause any of the following:

- i. An increase in the generation of nonproduct output per unit of production manufactured by the equipment of production process;
- ii. An exceedance of the maximum allowable concentration or rate of emission of any air contaminant for the production process or the entire facility, whichever is more stringent;
- iii. An exceedance of the maximum allowable concentration or effluent limitation of any discharge to waters of the State; or
- iv. The addition of a new production process.

(b) An action or change for which no permit is required under (a) above shall be reported to the Department within 120 days after the start of the action or change as an amendment of the facility-wide permit. A copy of the Pollution Prevention Plan Modification or Pollution Prevention Assessment shall be submitted with the amendment to the facility-wide permit.

(c) If the holder of a facility-wide permit makes a change that does not meet the criteria at (a) above, the change requires a permit, or a change to an existing permit(s) at N.J.A.C. 7:27-8.17 through 8.22.

#### **E. General Permits (7:27-8.8(c))**

A general permit is available for the following sources:

1. One or more tanks and/or pumps used for storing and/or pumping gasoline, diesel fuel, or kerosene, located at a single service station (retail or non-retail), if the station:

- i. Receives gasoline, diesel fuel, or kerosene from a delivery vessel and puts it into a stationary storage tank;
- ii. Transfers gasoline from a storage tank into a gasoline vapor laden fuel tank;
- iii. Has Stage 1 vapor recovery equipment that complies with N.J.A.C. 7:27-16.3 on all gasoline tanks at the station; and
- iv. Has Stage 2 vapor recovery equipment that complies with N.J.A.C. 7:27-16 on all gasoline pumps at the station.

2. One or more pieces of wood working equipment, located at the same facility, where all air

contaminant emissions from the equipment are captured and vented to a particulate control apparatus with a minimum removal efficiency of 99 percent.

3. A single boiler with a maximum rated heat input of less than 10 million BTUs per hour, combusting natural gas, number 2 commercial fuel oil, or both fuels (and no other fuels).
4. A single emergency generator that operates no more than 500 hours per year, and has a maximum rated heat input that is less than or equal to 15 million BTU per hour (generating approximately 1.5 megawatts of electricity) when the generator combusts diesel fuel, or 40 million BTU per hour (generating approximately 4.0 megawatts of electricity) when the generator combusts natural gas.
5. A bulk solid materials receiving and storage system, which uses pneumatic or mechanical conveying, where all particulate air contaminant emissions are captured and vented to a particulate control apparatus with a minimum removal efficiency of 99 percent.
6. One or more pieces of enclosed abrasive blasting equipment, located at the same facility, where all particulate air contaminant emissions from the equipment are captured and vented to a particulate control apparatus with a minimum removal efficiency of 99 percent.
7. A stationary storage tank which:
  - i. Does not have a floating roof;
  - ii. Has a maximum capacity of 300,000 gallons; and
  - iii. Is used for storing VOCs with a vapor pressure within the applicable limit below:
    - (1) If the tank has a maximum capacity of 20,000 gallons or less, vapor pressure shall be less than 11.1 psia (pounds per square inch absolute) at 70 degrees Fahrenheit;
    - (2) If the tank has a maximum capacity of more than 20,000 gallons but less than or equal to 40,000 gallons, vapor pressure shall be less than 4.0 psia at 70 degrees Fahrenheit;
    - (3) If the tank has a maximum capacity of more than 40,000 gallons but less than or equal to 300,000 gallons, vapor pressure shall be less than .75 psia at 70 degrees Fahrenheit.

#### **F. Permit Revisions (7:27-8.18(a))**

The following actions require prior approval from the Department through a permit revision:

1. A request for an increase in a maximum allowable emission limit, including correction of a typographical error or inaccurate calculation, if the correction would result in a higher maximum allowable emission limit.
2. An action that shall:
  - i. Increase actual emissions, to a rate or concentration greater than a maximum allowable emission limit; or



- ii. Cause the emission of a new air contaminant not specified in the permit and certificate. If the permit and certificate allows emission of a group of air contaminants, such as "total VOCs," or "total particulates," then any non-HAP air contaminant in that group is considered to be specified in the permit and certificate.
3. Use of a new raw material not specified in the permit, if the use would any of the following results (If the use would not cause any of these results, it shall be processed as a seven-day-notice under N.J.A.C. 7:27-8.20, or as an amendment under N.J.A.C. 7:27-8.21):
- i. An increase in actual emissions, to a rate or concentration greater than a maximum allowable emission limit;
  - ii. Emission of a new air contaminant not specified in the permit and certificate, at a level that meets or exceeds the applicable reporting threshold in Appendix 1, Tables A and B, incorporated herein by reference; or
  - iii. The source to become subject to a requirement that did not previously apply.
4. A reconstruction, as described in N.J.A.C. 7:27-8.23.
5. Any of the following changes, if the change would cause the ground level concentration of an air contaminant to increase in that portion of the atmosphere, external to buildings, to which the general public has access:
- i. The replacement of an existing stack or chimney with a shorter stack or chimney;
  - ii. A change in the number of stacks or chimneys serving a source, which results in any discharge height less than that of the tallest stack or chimney existing prior to the change;
  - iii. An increase in the diameter of stack or chimney; or
  - iv. A decrease in the exit temperature or volume of gas emitted from a stack or chimney.
6. Replacement of an entire permitted source with an identical source, if the source's potential to emit equals or exceeds any "state of the art" (SOTA) threshold in Appendix 1, Table A or B (if the potential to emit is below all SOTA thresholds, the replacement may be processed through an amendment under N.J.A.C. 7:27-8.21(b)6). For the purposes of this section, replacement means that the new source will take the place of the existing source in the manufacturing process, and the source being replaced will be permanently shut down.
7. Replacement of an entire permitted source with a non-identical source.
8. Construction or installation of a new significant source (including a control apparatus), if there are existing, permitted sources onsite, and the new source could, under N.J.A.C. 7:27-8.4(h), be combined on one permit application with the existing permitted sources. If the new source could not be combined under one permit with existing permitted sources under N.J.A.C. 7:27-8.4(h), installation of the new source would require a new permit of its own.

**G. Compliance Plan Changes (7:27-8.19(a))**

The following actions require compliance plan changes:

1. A decrease in the frequency of testing, monitoring, recordkeeping or reporting, to below the frequency specified in the permit and certificate.
2. A change in monitoring method.
3. A change in a level, rate, or limit for an operational parameter if:
  - i. The change would cause the source to operate outside of the range set by the permit for that parameter;
  - ii. The parameter is required under the permit and certificate to be tested, monitored, recorded, or reported to the Department; and
  - iii. The level, rate, or limit is not an emission limit.
4. A reduction in a source's potential to emit, through any of the actions listed at "i" through "iii" below. The permittee may take these actions without contacting the Department, but the reduction in potential to emit does not take effect until the Department approves the compliance plan change, making the emission decrease Federally enforceable. Until Department approval, the source's potential to emit remains unchanged. The following types of actions may be taken to reduce potential to emit under this paragraph:
  - i. A decrease in a maximum allowable emission rate;
  - ii. A decrease in maximum allowable hours of operation per time period (number of batches per time period for batch operations); or
  - iii. A decrease in maximum allowable production rate (production amount per batch for batch operations).

**H. Seven-day Notice Changes (7:27-8.20(b) and (c))**

(b) A seven-day-notice may be used for any change that meets all three of the following requirements:

1. The action is a physical or operational change that is outside the scope of activities allowed by the permit;
2. The action has the potential to result in an increase in actual emissions, but will not increase emissions over the allowable limits in the permit and certificate; and
3. The action will not alter stack parameters or characteristics so as to cause the ground level concentration of an air contaminant to increase in that portion of the atmosphere, external to buildings, to which the general public has access.

(c) A permittee shall submit a seven-day-notice for construction or installation of a new insignificant source (as defined at N.J.A.C. 7:27-8.1), if the emissions from the insignificant

source shall be released through the same control device as emissions from an existing, permitted significant source.

### **I. Amendments (7:27-8.21(b))**

The following actions require amendments:

1. A change in the permit and certificate information that allows the Department to identify and contact the permittee, including company name or mailing address; division name; plant name or address; name or address of any owner's agent; or name or telephone number of the on-site facility manager, any additional plant contact, or of any responsible official (as defined by N.J.A.C. 7:27-1.4).
2. A transfer of ownership or operational control of the source or the facility.
3. A change to the name, number, or designation given to any equipment or stack in the permit or certificate.
4. Any of the following changes to a stack or chimney or the use thereof, if the change complies with EPA stack height regulations at 40 CFR Part 51:
  - i. A change in the number of stacks or chimneys serving the source, if the change does not result in any discharge height less than that of the tallest stack or chimney existing prior to the change;
  - ii. A decrease in the diameter of a stack or chimney, if the exhaust is vented upward;
  - iii. The replacement of an existing stack or chimney with a taller stack or chimney, if this results in an effective stack height that is no less than that existing before the change; or
  - iv. An increase in the exit temperature or volume of gas emitted from a stack or chimney.
5. The use of a new raw material not specified in the permit (including a change in the contents of storage tank or container), or a change in the use of a raw material outside the limits on the permit, if the change shall not cause any of the following:
  - i. An increase in actual emissions;
  - ii. Emission of new air contaminant not specified in the permit and certificate, at a level that meets or exceeds the applicable reporting threshold in Appendix 1, Tables A and B; or  
The source to become subject to a requirement that did not previously apply.
6. Replacement of an entire piece of equipment or control apparatus with an identical one if the source's potential to emit is less than all of the applicable state of the art threshold levels in Appendix 1, Tables A and B.
7. Correction of a typographical error, unless the correction would result in an increase in the actual or allowable emissions. If the correction would result in such an increase, the permittee shall:

- i. File a permit revision under N.J.A.C. 7:27-8.18(a)1ii; or
- ii. If the change does not meet the criteria for a permit revision at N.J.A.C. 8.18(a)1ii, the permittee shall submit a seven-day notice under N.J.A.C. 7:27-8.20.

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